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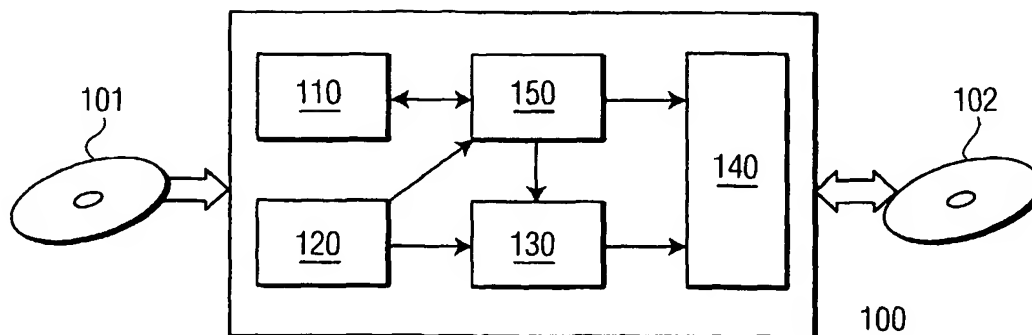
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[Continued on next page]

(54) Title: CREATING EXPIRING COPIES IN A CHECK-OUT/CHECK-IN SYSTEM



(57) Abstract: A check-in/check-out system (100) and method creates limited-duration copies of protected content material (101). The system is configured to allow up-to-N contemporaneous copies (102) of the protected content material. A log (110) maintains a record of the copies currently outstanding, and their expiration times, after which time a conforming rendering device will cease to render the material of this expired copy. When a copy is returned, the entry in the log is deleted (270). If a copy is not returned to the system (100) before its expiration time, the system is configured to also delete its entry from the log (201), thereby allowing another copy to be made (250) to replace the expired copy, even though the expired copy has not been returned.



*EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

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## B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX, IBM-TDB

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| Y          | WO 00 67256 A (KONINKL PHILIPS ELECTRONICS NV) 9 November 2000 (2000-11-09)<br>page 3, line 10 -page 4, line 4<br>page 5, line 14 -page 6, line 26<br>figures 1,2 | 1-10                  |
| Y          | US 5 291 596 A (MITA MAKOTO)<br>1 March 1994 (1994-03-01)<br>column 1, line 1 - line 27<br>column 4, line 11 -column 7, line 33<br>table 1<br>figure 3            | 1-10                  |
|            | ---<br>-/--   |                       |

☒ Further documents are listed in the continuation of box C.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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|------------|---|-----------------------|
| Y          | EP 0 715 246 A (XEROX CORP)<br>5 June 1996 (1996-06-05)<br>page 2, line 35 -page 3, line 5<br>page 5, line 10 -page 6, line 55; table 1<br>page 13, line 5 - line 35<br>figures 7,10,14<br>---  | 1-7                   |
| A          | US 5 745 879 A (WYMAN ROBERT M)<br>28 April 1998 (1998-04-28)<br>column 2, line 40 - line 44<br>column 9, line 23 - line 28<br>column 9, line 49 - line 60<br>column 10, line 65 -column 11, line 37<br>column 13, line 43 -column 14, line 20<br>----- | 1-10                  |

## INTERNATIONAL SEARCH REPORT

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|---|---|---------------------|---|--|
| WO 0067256                                | A | 09-11-2000          | CN 1302436 T<br>WO 0067256 A1<br>EP 1092220 A1<br>JP 2003522349 T   | 04-07-2001<br>09-11-2000<br>18-04-2001<br>22-07-2003   |
| US 5291596                                | A | 01-03-1994          | JP 5134957 A  | 01-06-1993   |
| EP 0715246                                | A | 05-06-1996          | US 5638443 A<br>DE 69530460 D1<br>DE 69530460 T2<br>EP 1293869 A2<br>EP 1293870 A2<br>EP 1335260 A1<br>EP 1335261 A1<br>EP 1335262 A1<br>EP 1335263 A1<br>EP 0715246 A1<br>JP 8263439 A   | 10-06-1997<br>28-05-2003<br>23-10-2003<br>19-03-2003<br>19-03-2003<br>13-08-2003<br>13-08-2003<br>13-08-2003<br>13-08-2003<br>05-06-1996<br>11-10-1996   |
| US 5745879                                | A | 28-04-1998          | AT 175281 T<br>AU 659652 B2<br>AU 2015892 A<br>AU 2247092 A<br>DE 69228039 D1<br>DE 69228039 T2<br>DE 69228350 D1<br>DE 69228350 T2<br>EP 0538453 A1<br>EP 0538464 A1<br>IE 921475 A1<br>JP 3032788 B2<br>JP 6500878 T<br>NZ 242627 A<br>WO 9220021 A1<br>WO 9220022 A1 | 15-01-1999<br>25-05-1995<br>21-12-1992<br>21-12-1992<br>11-02-1999<br>05-08-1999<br>18-03-1999<br>23-09-1999<br>28-04-1993<br>28-04-1993<br>18-11-1992<br>17-04-2000<br>27-01-1994<br>26-07-1995<br>12-11-1992<br>12-11-1992 |